

CLAIMS

1. A temperature control method for a liquid in an analyzing instrument which is a method for adjusting the  
5 liquid held on an analyzing instrument to a target temperature,

wherein thermal energy is supplied to the liquid by passing a magnetic flux across the analyzing instrument for raising the temperature of the liquid.

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2. A temperature control method according to Claim 1, wherein the analyzing instrument includes a heating layer which heats up when a magnetic flux is passed across it, and

15 wherein the temperature of the liquid is raised using the thermal energy from the heating of the heating layer.

20 3. A temperature control method according to Claim 2, wherein the heating layer is formed as a thin metal film.

4. A temperature control method according to Claim 3, wherein the thin metal film is formed from aluminum, nickel or copper to have a thickness of 1-200  $\mu\text{m}$ .

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5. A temperature control method according to Claim 1, wherein the analyzing instrument has a reaction zone for

reacting a sample and a reagent, the temperature is raised with respect to the liquid present in the reaction zone.

5 6. A temperature control method according to Claim 1, wherein the temperature of the liquid is controlled by monitoring the temperature of the liquid and using the monitoring results as feedback for repeatedly controlling a state of the magnetic flux passed across the analyzing  
10 instrument.

7. A temperature control method according to Claim 1, wherein the temperature of the liquid is controlled by first ascertaining relationship between an environmental  
15 temperature around the liquid and a state of the magnetic flux passed across the analyzing instrument necessary for raising the temperature of the liquid to the target temperature, determining an amount of control necessary to achieve the target passage state of the magnetic flux  
20 based on said relationship and the measured environmental temperature, and then controlling the passage state of the magnetic flux in the analyzing instrument according to the determined amount of control.

25 8. A temperature control method according to Claim 1, wherein the analyzing instrument comprises a microdevice used for analyzing a tiny amount of sample.

9. An analyzing instrument used for analyzing a sample, comprising a heating layer which is heated by passage of a magnetic flux.

5 10. An analyzing instrument according to Claim 9, wherein the heating layer is formed as a thin metal film.

11. An analyzing instrument according to Claim 10, wherein the thin metal film is formed from aluminum, 10 nickel or copper.

12. An analyzing instrument according to Claim 11, wherein the thin metal film has a thickness of 1-200  $\mu\text{m}$ .

15 13. An analyzing instrument according to Claim 9, comprising a reaction zone for reacting a sample and a reagent, wherein the heating layer is formed where it can supply thermal energy to the liquid present in the 20 reaction zone.

14. An analyzing instrument according to Claim 13, wherein the heating layer covers a peripheral portion of the reaction zone.

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15. An analyzing instrument according to Claim 13, wherein the heating layer covers the reaction zone.

16. An analyzing instrument according to Claim 13, wherein the heating layer is formed in the reaction zone.

5 17. An analyzing instrument according to Claim 9, which is a microdevice for analyzing a tiny amount of sample.

10 18. A temperature detecting analyzing apparatus for analyzing a sample with use of a sample-holding analyzing instrument while adjusting a temperature of a liquid held on the analyzing instrument, the analyzing apparatus comprising a magnetic generating coil for generating a magnetic flux across the analyzing instrument.

15 19. A temperature detecting analyzing apparatus according to Claim 18, further comprising a temperature detector for measuring a temperature of the liquid or an environmental temperature around the liquid, and a controller for controlling a state of the magnetic flux 20 generated by the magnetic generating coil based on the measurement results of the temperature detector.

25 20. A temperature detecting analyzing apparatus according to Claim 19, further comprising an AC voltage applier which causes the magnetic generating coil to generate a magnetic flux, wherein the controller controls

the state of the magnetic flux generated by the magnetic generating coil by controlling the An AC voltage applier.